

## **REMARKS**

The foregoing amendments to the claims and drawings along with the remarks presented hereafter are intended to place the subject application in condition for allowance. The drawings are amended as discussed in section 1 below. Claim 13 is amended to correct a typographical error by removing the phrase "and reply." Claim 15 is amended to clarify that the discovering device uses the received network address to establish communications via the common network "between the discovering device and" the discoverable device that transmitted the address. Claim 30 is amended to include the fact that the network address of a discoverable device is discovered by a discovering device "in order to facilitate the transfer of data and other communications over the common network," and the fact that "the discovering device uses the address assigned to the discoverable device on the common network to establish communications via the common network between the discovering device and the discoverable device that transmitted the signal comprising data representing the address." Claim 30 is further amended as discussed in section 2 below to overcome a non-statutory subject matter rejection. No new matter is introduced as a result of any of these amendments. In view of these amendments and the following reasoning for allowance, the applicant hereby respectfully requests further examination and reconsideration of the subject application.

### **1. Objection to Drawings**

The aforementioned Office Action of August 31, 2007 objected to the drawings under 37 CFR §1.83(a). The Office Action stated the following: "The drawings must show every feature of the invention specified in the claims. Therefore, the signature, request, and reply signals indicating the type of device as in claims 2, 16, 17, 25, and 26, the audio watermark as in claims 4-6, the encryption/decryption of claims 11, 12, 22, and 28, and the confirmation actuator ... as in claims 13, 23, and 29 must be shown ... ." In order to address these issues, amendments to the drawings are presented on page 8. It is respectfully requested that the drawing changes be approved and the objection to the drawings be withdrawn.

## **2. Rejection of Claim 30 Under 35 USC §101**

The aforementioned Office Action of August 31, 2007 rejected claim 30 under 35 USC §101 “because the claimed invention is directed to non-statutory subject matter.” The Office Action further stated: “Computer readable medium may be “carrier wave” as disclosed in at least page 11 lines 7-30, which is a form of energy not falling into one of the four statutory categories of invention ....” While the applicant does not admit to, and does not believe, that the aforementioned “computer readable medium” is non-statutory subject matter, in order to overcome this rejection, this claim has been amended to more particularly recite a computer-readable “storage” medium having computer-executable instructions “stored thereon” which are “operable to” perform the functions recited in the claim. Accordingly, it is kindly requested that the rejection of this claim be reconsidered.

## **3. Rejection of Claim 3 on the Grounds of Double Patenting**

The aforementioned Office Action of August 31, 2007 provisionally rejected claim 3 “on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/869119.” While the applicant makes no admission that claim 3 of the subject application is actually obvious over claim 1 of this co-pending application, since the subject application and this co-pending application are commonly owned, the applicant has elected to file a terminal disclaimer herewith in compliance with 37 CFR §1.321(c) in order to obviate this rejection.

## **4. Interview Summary**

The applicant filed an Applicant Initiated Interview Request Form PTOL-413A along with an agenda on November 4, 2007. A telephonic interview meeting was subsequently held on November 5, 2007 between the undersigned and Examiner Weidner during which the topics in the agenda were discussed. In particular, it was pointed out by the undersigned that despite the teachings of FIG. 6 and paragraph [0068] in Krzyzanowski et al. (U.S. Publication No. 2004/0133704 A1), the reference does not teach that the handheld/mobile controller ever communicates with the legacy device bridge via the common network, as would be required by the rejected claims. While no agreement was reached, the Examiner stated he would consider the arguments further.

5. **Rejection of Claims 15, 19, 20 and 23 Under 35 USC §102(e)**

The aforementioned Office Action of August 31, 2007 rejected claims 15, 19, 20 and 23 of the subject application under 35 USC §102(e) as being anticipated by Krzyzanowski et al. (U.S. Publication No. 2004/0133704 A1 – hereafter “Krzyzanowski”). The applicant respectfully disagrees with this contention of anticipation for the following reasons.

The **applicant claims** a process in which “the discovering device receiv[es] a signal transmitted by a discoverable electronic device” where “the signal comprises data representing the address assigned to the discoverable device on the common network, and ... is not transmitted via the common network.” Then “**the discovering device us[es] the received network address to establish communications via the common network between the discovering device and the discoverable device that transmitted the address.**”

Krzyzanowski teaches a system in which a “legacy device bridge performs protocol/conversion to enable a network-attached entity that uses a packet-based communication protocol to communicate with and control legacy devices, such as consumer electronics, that rely exclusively on infrared (IR) or serial communication protocols.” (refer to paragraph [0032]) Further to this point, **Krzyzanowski teaches that the IR-based legacy consumer electronic devices are specifically not capable of communicating over the packet-based common network.** (refer to paragraphs [0036] and [0042], among other places) As such, the **IR-based legacy devices do not have a network address. Hence, the bridge cannot use a network address received from an IR-based legacy device to establish communications via the common network between the bridge and the legacy device.**

Granted, Krzyzanowski also teaches the following:

“In an embodiment, the legacy device bridge is equipped with an IrDA ... beacon for providing location awareness information ... the legacy device bridge is programmed to emit a set of infrared pulses that uniquely identifies the bridge to handheld controllers which are communicatively coupled to a network. These codes can then be mapped to, or associated with, room locations by a central server coupled to the network, or, alternatively, a mapping table can be stored in the handheld controller for performing this function.” (refer to paragraph [0068])

“[T]he legacy device bridge transmits an ID that corresponds to its globally unique MAC ... address.” (refer to paragraph [0069])

"[A]t step 902 ... a legacy device bridge emits an IR signal to a mobile controller, wherein the IR signal comprises a unique ID assigned to the legacy device bridge ... At step 904, the mobile controller receives the IR signal and extracts the unique ID of the legacy device bridge therefrom. At step 906, the mobile controller transmits the unique ID to a central server over an IP network. At step 908, the central server maps the unique ID to a given location within a controlled environment ... At step 910, the central server sends configuration information to the mobile controller based on the location identified in step 908. This configuration information is used to reconfigure the mobile controller for the command and control of selected devices within a certain vicinity of the location identified in step 908." (refer to paragraph [0072])

However, **even if Krzyzanowski's handheld/mobile controller** (hereafter referred to simply as a handheld controller) **were equated to the applicant's claimed discovering device and Krzyzanowski's bridge were equated to the applicant's claimed discoverable device, nowhere does Krzyzanowski teach that the handheld controller ever uses a network address received from a bridge to establish communications via the common network between the handheld controller and the bridge. In fact, such communication is completely unnecessary** since, as is appreciated by one skilled in the art, the handheld controller operates to provide direct (i.e. not via the bridge) remote IR control of the legacy devices which include a television, VCR, DVD player, thermostat, lamp and the like. (refer to paragraph [0036]) As discussed heretofore, the handheld controller does not and cannot communicate with these legacy devices via the common network. Rather, as described heretofore, Krzyzanowski teaches that the handheld controller transmits the unique ID of the bridge to a central server over the common IP network, and then the server sends configuration information to the handheld controller which is used to reconfigure the handheld controller for the IR control of selected legacy devices which are located within a certain vicinity of the bridge.

A prima facie case of anticipation is established only when the Examiner can show that the cited reference teaches each of the claimed elements of a rejected claim. In this case, based on the remarks presented above, the Examiner has not shown that the Krzyzanowski reference teaches the subject application's aforementioned claimed feature. Thus, the rejected claims recite a feature that is not taught in the cited art, and as such, a prima facie case of anticipation cannot be established. Accordingly, it is respectfully requested that the rejection of claims 15, 19, 20 and 23 be reconsidered based on the following novel language exemplified in claim 15:

"the discovering device receiving a signal transmitted by a discoverable electronic device, wherein the signal comprises data representing the address assigned to the

discoverable device on the common network, and wherein the signal is not transmitted via the common network and is transmitted in a manner that substantially limits its reception to the delimited space; and

the discovering device using the received network address to establish communications via the common network between the discovering device and the discoverable device that transmitted the address.”

### 5.1 **Claim 23**

In addition, with further regard to claim 23, the **applicant claims** that “one or more of the discoverable devices further comprises **a confirmation actuator which is only capable of being activated by person physically present in the delimited space**” and that **“a person must activate the confirmation actuator on a discoverable device having one before that discoverable device will transmit its signal.”**

The Examiner contends that Krzyzanowski teaches these features in paragraphs [0061], [0088], [0089], and FIG. 11 steps 1104 and 1112. However, the applicant respectfully asserts that this is not the case. Rather, in these cited paragraphs, Krzyzanowski teaches the following. The low-level IR or serial codes necessary for controlling legacy devices are stored in the control server. (refer to paragraph [0060]) These codes are provided to the server using a variety of techniques. In one technique a user manually enters the codes into the bridge which then uploads the codes to the server. In another technique the bridge gets the codes from the legacy devices via IR queries to the devices and then uploads the codes to the server. (refer to paragraph [0061]) FIG. 11 correspondingly shows the steps associated with these techniques, and for transmitting a control code to a legacy device. (refer to paragraphs [0088] and [0089] – it is noted that Krzyzanowski refers to the bridge as a “virtualization appliance” when it is operating in this fashion.) **Nowhere does Krzyzanowski teach that the legacy devices, bridge or handheld controller contain any sort of confirmation actuator which must be activated by a person before transmitting their signal.**

Thus, the Examiner has not shown that Krzyzanowski teaches the subject application’s aforementioned claimed features. As such, a prima facie case of anticipation cannot be established. Accordingly, it is respectfully requested that the rejection of claim 23 also be reconsidered based on its following novel language:

“The process of Claim 15, wherein one or more of the discoverable devices further comprises a confirmation actuator which is only capable of being activated by person

physically present in the delimited space, and wherein a person must activate the confirmation actuator on a discoverable device having one before that discoverable device will transmit its signal.”

**6. Rejection of Claims 1-9 and 10-14 Under 35 USC §103(a)**

The aforementioned Office Action of August 31, 2007 rejected claims 1, 2 and 10-14 of the subject application under 35 USC §103(a) as being unpatentable over Krzyzanowski in view of Tie et al. (U.S. Publication No. 2006/0143458 A1 – hereafter “Tie”) and Lee et al. (U.S. Publication No. 2002/0080800 A1 – hereafter “Lee”). The Office Action further rejected claim 3 of the subject application under 35 USC §103(a) as being unpatentable over Krzyzanowski in view of Tie and Lee and further in view of Hayek et al. (U.S. Publication No. 2002/0152314 A1 – hereafter “Hayek”). The Office Action yet further rejected claims 4-9 of the subject application under 35 USC §103(a) as being unpatentable over Krzyzanowski in view of Tie and Lee, further in view of Hayek, and further in view of Tewfik et al. (U.S. Patent No. 6,061,793 – hereafter “Tewfik”). The applicant respectfully disagrees with these contentions of obviousness for the following reasons.

The **applicant claims** “[a] system for a discovering electronic device to discover the presence and network address of one or more **discoverable electronic devices which are connected to the same network as the discovering device ...**” “[A] general purpose computing device residing in the **discovering electronic device ... receive[s] a signature signal transmitted by a one of said one or more discoverable electronic devices, wherein the signal comprises data representing a signature of the discoverable device indicative of ... its being accessible via said network.**” The discovering electronic device then **“transmit[s] a request signal for receipt by the discoverable electronic device whose signature signal was received** which requests the address assigned to that discoverable device on the network to be transmitted to the discovering device, and **receive[s] a reply signal transmitted by the discoverable electronic device whose signature was received** which comprises data representing the requested network address, wherein **the signature, request and reply signals are not transmitted via the network.**” These features are advantageous for a number of different reasons including the fact that the claimed discovery scheme does not require the use of the common network and as such is unaffected by unavailability of the network multicast feature which is typically used for discovery purposes. (refer to applicant’s specification as originally filed, page 5, lines 17-20)

As discussed in section 5 above, Krzyzanowski teaches that the legacy consumer electronic devices rely exclusively on IR or serial communication protocols, and that a legacy device bridge performs protocol conversion to enable a network-attached entity to communicate with the IR-based legacy devices. Thus, **Krzyzanowski teaches that the IR-based legacy consumer electronic devices are specifically not capable of communicating over the packet-based common network and do not have a network address. This is contrary to what is claimed by the applicant in regard to the discoverable devices.**

As also discussed in section 5, Krzyzanowski teaches that the bridge can be equipped with an IR beacon which transmits IR pulses that identify the bridge to a handheld controller. However, **nowhere does Krzyzanowski teach that the bridge is able to receive IR signals from a handheld controller. In fact, this feature is completely unnecessary** since, as is appreciated by one skilled in the art, the handheld controller operates to provide direct (i.e. not via the bridge) remote IR control of the legacy devices which include a television, VCR, DVD player, thermostat, lamp and the like. Therefore, **even if Krzyzanowski's handheld controller were equated to the applicant's claimed discovering device and Krzyzanowski's bridge were equated to the applicant's claimed discoverable device, nowhere does Krzyzanowski teach that the handheld controller ever transmits any type of IR signal to the bridge, nor would this feature ever be necessary** in the system taught by Krzyzanowski. Consequently, the purported features of Tie cited by the Examiner are incompatible with, and would be non-operational within, the system taught by Krzyzanowski if one were to attempt to incorporate these features into the system of Krzyzanowski in the manner suggested by the Examiner.

Tie teaches a method for the secure access of a mobile terminal (MT) to a wireless local area network. Granted, Tie's method uses signatures. **However, Tie's teaching of the use of signatures is distinctly different than the aforementioned features claimed by the applicant.** More particularly, the method taught by Tie utilizes both an access point (AP) device and an authentication server (AS) device in conjunction with the MT. The MT first sends an "access authentication request" to the AP – this request contains the MT's certificate but does not contain the MT's signature. The AP then forwards the MT request to the AS in the form of a "certificate authentication request" – this request contains both the MT's and AP's certificate but does not contain either the MT's or AP's signature. The AS then authenticates the MT's and AP's certificates and sends a "certificate authentication response," containing the AS's signature, to the AP. The AP then authenticates the AS's signature and sends an "**access authentication**

**response” to the MT – this response contains the AS’s signature, not the AP’s signature** (as would need to be the case if Tie were to read on the aforementioned features claimed by the applicant). The MT then sends a “secret key negotiation request,” containing the MT’s signature, to the AP. Finally, the AP sends a “secret key negotiation response,” containing the AP’s signature, to the MT. (refer to Fig. 3 and paragraphs [0009], [0018] and [0029])

**Hence, even if Tie’s AP were equated to the applicant’s claimed discoverable device and Tie’s MT were equated to the applicant’s claimed discovering device, nowhere does Tie teach that the MT receives a signature signal transmitted by the AP, where the received signal contains data representing a signature of the AP, and then the MT transmits a request signal for receipt by the AP whose signature was received, and then the MT receives a reply signal transmitted by the AP whose signature was received. Additionally, neither Lee, nor Hayek, nor Tewfik teaches these features.**

In order to deem the applicant’s claims unpatentable under 35 USC §103(a), a prima facie case showing obviousness must be made. To make a prima facie case showing obviousness, all of the elements of the recited claims must be considered, especially when they are missing from the prior art. If a claimed element is *not* taught in the prior art and has advantages not appreciated by the prior art, then no prima facie case of obviousness exists. The Federal Circuit court has stated that it was an error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein (*In Re Fine*, 837 F.2d 107, 5 USPQ2d 1596 (Fed. Cir. 1988)).

In this case, based on the remarks presented above, it is the applicant's position that neither Krzyzanowski, nor Tie, nor Lee, nor Hayek, nor Tewfik, nor the cited combinations thereof teaches the subject application's aforementioned claimed features. Thus, the rejected claims recite features that are not taught in the cited art. Furthermore, neither Krzyzanowski, nor Tie, nor Lee, nor Hayek, nor Tewfik, nor the cited combinations thereof appreciates the aforementioned advantage of these features, namely the fact that the claimed discovery scheme does not require the use of the common network and as such is unaffected by unavailability of the network multicast feature which is typically used for discovery purposes. As such, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that rejected claims 1, 2 and 10-14 are patentable under 35 USC §103(a) over Krzyzanowski in view of Tie and Lee. This lack of prima facie showing of



obviousness also means that rejected claim 3 is patentable under 35 USC §103(a) over Krzyzanowski in view of Tie and Lee and further in view of Hayek. This lack of prima facie showing of obviousness also means that and rejected claims 4-9 are patentable under 35 USC §103(a) over Krzyzanowski in view of Tie and Lee, further in view of Hayek, and further in view of Tewfik. Accordingly, it is respectfully requested that the rejection of these claims be reconsidered based on the following non-obvious language exemplified in claim 1:

“A system for a discovering electronic device to discover the presence and network address of one or more discoverable electronic devices which are connected to the same network as the discovering device and which are located in the same delimited space as the discovering device, comprising:

a computer program comprising program modules executable by the general purpose computing device, wherein the computing device is directed by the program modules of the computer program to,

receive a signature signal transmitted by a one of said one or more discoverable electronic devices, wherein the signal comprises data representing a signature of the discoverable device indicative of its presence in the delimited space and its being accessible via said network,

transmit a request signal for receipt by the discoverable electronic device whose signature was received which requests the address assigned to that discoverable device on the network to be transmitted to the discovering device, and

receive a reply signal transmitted by the discoverable electronic device whose signature was received which comprises data representing the requested network address, wherein

the signature, request and reply signals are not transmitted via the network and are transmitted in a manner that substantially limits their reception to the delimited space.”

## 6.1 Claims 13 and 14

In addition, with further regard to claims 13 and 14, the **applicant claims** that “one or more of the discoverable devices further comprises **a confirmation actuator which is only capable of being activated by person physically present in the delimited space**” and that “**a person must activate the confirmation actuator on a discoverable device having one before that discoverable device will transmit the signature signal**” or “**reply signal.**” These features are advantageous since they provide an added level of security in the system. (refer to applicant’s specification as originally filed, page 24, lines 15-30)

The Examiner contends that Krzyzanowski teaches these features in paragraphs [0061], [0088], [0089], and FIG. 11 steps 1104 and 1112. However, for the reasons presented in section 5.1 above, the applicant respectfully asserts that this is simply not the case. **Nowhere does Krzyzanowski teach that the legacy devices, bridge or handheld controller contains any sort**

**of confirmation actuator which must be activated by a person before transmitting their signal. Additionally, neither Tie nor Lee teaches this feature.**

Thus, it is the applicant's position that neither Krzyzanowski, nor Tie, nor Lee, nor the cited combination thereof teaches the subject application's aforementioned claimed features. Furthermore, these cited references do not appreciate the aforementioned advantage of these features. As such, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. Accordingly, it is respectfully requested that the rejection of claims 13 and 14 also be reconsidered based on the following non-obvious language:

In claim 13: "The system of Claim 1, wherein one or more of the discoverable devices further comprises a confirmation actuator which is only capable of being activated by person physically present in the delimited space, and wherein a person must activate the confirmation actuator on a discoverable device having one before that discoverable device will transmit the signature signal."

In claim 14: "The system of Claim 1, wherein one or more of the discoverable devices further comprises a confirmation actuator which is only capable of being activated by person physically present in the delimited space, and wherein a person must activate the confirmation actuator on a discoverable device having one before that discoverable device will transmit the reply signal."

## **7. Rejection of Claims 16-18, 21 and 22 Under 35 USC §103(a)**

The aforementioned Office Action of August 31, 2007 rejected claims 16-18 and 22 of the subject application under 35 USC §103(a) as being unpatentable over Krzyzanowski in view of Tie. The Office Action further rejected claim 21 of the subject application under 35 USC §103(a) as being unpatentable over Krzyzanowski. The applicant respectfully disagrees with these contentions of obviousness for the following reasons.

As discussed in section 5 above, the **applicant claims** a process in which "the discovering device receiv[es] a signal transmitted by a discoverable electronic device" where "the signal comprises data representing the address assigned to the discoverable device on the common network, and ... is not transmitted via the common network." Then "**the discovering device us[es] the received network address to establish communications via the common network between the discovering device and the discoverable device that transmitted the address.**"

As also discussed in section 5, Krzyzanowski teaches that the legacy consumer electronic

devices rely exclusively on IR or serial communication protocols, and that a legacy device bridge performs protocol conversion to enable a network-attached entity to communicate with the IR-based legacy devices. Thus, **Krzyzanowski teaches that the IR-based legacy consumer electronic devices are specifically not capable of communicating over the packet-based common network and do not have a network address. Hence, the bridge cannot use a network address received from an IR-based legacy device to establish communications via the common network between the bridge and the legacy device.**

As also discussed in section 5, Krzyzanowski teaches that the bridge can be equipped with an IR beacon which transmits IR pulses that identify the bridge to a handheld controller. However, **even if Krzyzanowski's handheld controller were equated to the applicant's claimed discovering device and Krzyzanowski's bridge were equated to the applicant's claimed discoverable device, nowhere does Krzyzanowski teach that the handheld controller ever uses a network address received from a bridge to establish communications via the common network between the handheld controller and the bridge. In fact, such communication is completely unnecessary for the reasons presented in section 5. As discussed in section 5, the handheld controller does not and cannot communicate with these legacy devices via the common network.**

Tie, which is discussed in detail in section 6 above, **adds nothing to Krzyzanowski which would enable Krzyzanowski's bridge to use a network address received from an IR-based legacy device to establish communications via the common network between the bridge and the legacy device, or result in Krzyzanowski's handheld controller ever using a network address received from a bridge to establish communications via the common network between the handheld controller and the bridge. In fact, as also discussed in section 6, the purported features of Tie cited by the Examiner are incompatible with, and would be non-operational within, the system taught by Krzyzanowski if one were to attempt to incorporate these features into the system of Krzyzanowski in the manner suggested by the Examiner.**

Thus, it is the applicant's position that neither Krzyzanowski, nor Tie, nor the combination of Krzyzanowski and Tie teaches the subject application's aforementioned claimed feature. Thus, the rejected claims recite a feature that is not taught in the cited art. Furthermore, neither Krzyzanowski, nor Tie, nor the combination of Krzyzanowski and Tie appreciates the aforementioned advantage of this feature. As such, no prima facie case of obviousness has been

established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that rejected claims 16-18 and 22 are patentable over Krzyzanowski in view of Tie, and rejected claim 21 is patentable over Krzyzanowski. Accordingly, it is respectfully requested that the rejection of claims 16-18, 21 and 22 be reconsidered based on the following non-obvious language in claim 15:

“the discovering device receiving a signal transmitted by a discoverable electronic device, wherein the signal comprises data representing the address assigned to the discoverable device on the common network, and wherein the signal is not transmitted via the common network and is transmitted in a manner that substantially limits its reception to the delimited space; and

the discovering device using the received network address to establish communications via the common network between the discovering device and the discoverable device that transmitted the address.”

#### 8. **Rejection of Claims 24-29 Under 35 USC §103(a)**

The aforementioned Office Action of August 31, 2007 rejected claims 24, 27, and 29 of the subject application under 35 USC §103(a) as being unpatentable over Krzyzanowski in view of Lee. The Office Action further rejected claims 25, 26 and 28 of the subject application under 35 USC §103(a) as being unpatentable over Krzyzanowski in view of Lee, and further in view of Tie. The applicant respectfully disagrees with these contentions of obviousness for the following reasons.

The **applicant claims** “[a] system for a discovering electronic device to discover the presence and network address of one or more **discoverable electronic devices which are connected to the same network as the discovering device ... the discovering electronic device ... transmit[s] a request signal which requests the network address assigned to a discoverable device** be transmitted to the discovering device.” The discovering electronic device then “**receive[s] a reply signal transmitted by a discoverable electronic device** which comprises ... the requested network address, wherein **the request and reply signals are not transmitted via the network ...**” An advantage of these features is discussed in section 6 above.

As discussed in section 5 above, Krzyzanowski teaches that the legacy consumer electronic devices rely exclusively on IR or serial communication protocols, and that a legacy device bridge performs protocol conversion to enable a network-attached entity to communicate with the IR-based legacy devices. Thus, **Krzyzanowski teaches that the IR-based legacy consumer electronic devices are specifically not capable of communicating over the packet-based**

common network and do not have a network address.

As also discussed in section 5, Krzyzanowski teaches that the bridge can be equipped with an IR beacon which transmits IR pulses that identify the bridge to a handheld controller. However, **nowhere does Krzyzanowski teach that the bridge is able to receive IR signals from a handheld controller. In fact, this feature is completely unnecessary since, as is appreciated by one skilled in the art, the handheld controller operates to provide direct (i.e. not via the bridge) remote IR control of the legacy devices. Therefore, even if Krzyzanowski's handheld controller were equated to the applicant's claimed discovering device and Krzyzanowski's bridge were equated to the applicant's claimed discoverable device, nowhere does Krzyzanowski teach that the handheld controller ever transmits any type of IR signal to the bridge, nor would this feature ever be necessary in the system taught by Krzyzanowski.**

Consequently, **the purported features of Lee cited by the Examiner are incompatible with, and would be non-operational within, the system taught by Krzyzanowski** if one were to attempt to incorporate these features into the system of Krzyzanowski in the manner suggested by the Examiner. **Tie, which is discussed in detail in section 6 above, adds nothing to Krzyzanowski which would change this situation.** In fact, as also discussed in section 6, the purported features of Tie cited by the Examiner are also incompatible with, and would be non-operational within, the system taught by Krzyzanowski if one were to attempt to incorporate these features into the system of Krzyzanowski in the manner suggested by the Examiner.

Thus, it is the applicant's position that neither Krzyzanowski, nor Lee, nor Tie, nor the cited combinations thereof teaches the subject application's aforementioned claimed features. Thus, the rejected claims recite features that are not taught in the cited art. Furthermore, none of the cited references appreciates the aforementioned advantage of these features. As such, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that rejected claims 24, 27, and 29 are patentable over Krzyzanowski in view of Lee, and rejected claims 25, 26 and 28 are patentable over Krzyzanowski in view of Lee, and further in view of Tie. Accordingly, it is respectfully requested that the rejection of claims 24-29 be reconsidered based on the following non-obvious language exemplified in claim 24:

"A system for a discovering electronic device to discover the presence and network address of one or more discoverable electronic devices which are connected to the same

network as the discovering device and which are located in the same delimited space as the discovering device, comprising:

a computer program comprising program modules executable by the general purpose computing device, wherein the computing device is directed by the program modules of the computer program to,

transmit a request signal which requests the network address assigned to a discoverable device be transmitted to the discovering device, and

receive a reply signal transmitted by a discoverable electronic device which comprises data representing the requested network address, wherein

the request and reply signals are not transmitted via the network and are transmitted in a manner that substantially limits their reception to the delimited space."

## 8.1 Claim 29

In addition, with further regard to claim 29, the **applicant claims** that "one or more of the discoverable devices further comprises **a confirmation actuator which is only capable of being activated by person physically present in the delimited space**" and that **"a person must activate the confirmation actuator on a discoverable device having one before that discoverable device will transmit the reply signal."** As discussed in section 6.1 above, these features are advantageous since they provide an added level of security in the system.

The Examiner contends that Krzyzanowski teaches these features in paragraphs [0061], [0088], [0089], and FIG. 11 steps 1104 and 1112. However, for the reasons presented in section 5.1 above, the applicant respectfully asserts that this is simply not the case. **Nowhere does Krzyzanowski teach that the legacy devices, bridge or handheld controller contains any sort of confirmation actuator which must be activated by a person before transmitting their signal. Lee also does not teach this feature.**

Thus, it is the applicant's position that neither Krzyzanowski, nor Lee, nor the combination of Krzyzanowski and Lee teaches the subject application's aforementioned claimed features. Furthermore, neither Krzyzanowski, nor Lee, nor the combination of Krzyzanowski and Lee appreciates the aforementioned advantage of these features. As such, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. Accordingly, it is respectfully requested that the rejection of claim 29 also be reconsidered based on its following non-obvious language:

"The system of Claim 24, wherein one or more of the discoverable devices further comprises a confirmation actuator which is only capable of being activated by person physically present in the delimited space, and wherein a person must activate the confirmation actuator on a

discoverable device having one before that discoverable device will transmit the reply signal.”

## 9. Rejection of Claim 30 Under 35 USC §103(a)

The aforementioned Office Action of August 31, 2007 rejected claim 30 of the subject application under 35 USC §103(a) as being unpatentable over Krzyzanowski. The applicant respectfully disagrees with this contention of obviousness for the following reasons.

The **applicant claims** “computer-executable instructions ... for facilitating the discovery of the network address of a discoverable electronic device by a discovering electronic device, wherein each device is connected to a common network ..., in order to facilitate the transfer of data and other communications over the common network ..., wherein **the discovering device uses the address assigned to the discoverable device on the common network to establish communications via the common network between the discovering device and the discoverable device that transmitted the ... address.**” An advantage of these features is discussed in section 6 above.

As discussed in section 5 above, Krzyzanowski teaches that the legacy consumer electronic devices rely exclusively on IR or serial communication protocols, and that a legacy device bridge performs protocol conversion to enable a network-attached entity to communicate with the IR-based legacy devices. Thus, **Krzyzanowski teaches that the IR-based legacy consumer electronic devices are specifically not capable of communicating over the packet-based common network and do not have a network address. Hence, the bridge cannot use the network address of an IR-based legacy device to establish communications via the common network between the bridge and the legacy device.**

As also discussed in section 5, Krzyzanowski teaches that the bridge can be equipped with an IR beacon which transmits IR pulses that identify the bridge to a handheld controller. However, **even if Krzyzanowski’s handheld controller were equated to the applicant’s claimed discovering device and Krzyzanowski’s bridge were equated to the applicant’s claimed discoverable device, nowhere does Krzyzanowski teach that the handheld controller ever uses the network address of a bridge to establish communications via the common network between the handheld controller and the bridge. In fact, such communication is completely unnecessary for the reasons presented in section 5. As discussed in section 5, the handheld**

controller does not and cannot communicate with these legacy devices via the common network.

Thus, it is the applicant's position that Krzyzanowski does not teach the subject application's aforementioned claimed features. Thus, the rejected claim recites features that are not taught in the cited art. Furthermore, Krzyzanowski does not appreciate the aforementioned advantage of these features. As such, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that rejected claim 30 is patentable over Krzyzanowski. Accordingly, it is respectfully requested that the rejection of claim 30 be reconsidered based on its following non-obvious language:

"A computer-readable storage medium having computer-executable instructions stored thereon for facilitating the discovery of the network address of a discoverable electronic device by a discovering electronic device, wherein each device is connected to a common network and located in the same delimited space, in order to facilitate the transfer of data and other communications over the common network, said computer-executable instructions operable to:

transmit a signal comprising data representing the address assigned to the discoverable device on the common network from the discoverable device to the discovering device, wherein the signal is not transmitted via the common network and is transmitted in a manner that substantially limits its reception to the delimited space; and repeat the transmission of the signal on a prescribed periodic basis, wherein the discovering device uses the address assigned to the discoverable device on the common network to establish communications via the common network between the discovering device and the discoverable device that transmitted the signal comprising data representing the address.

#### 10. Summary

In view of the amendments and arguments set forth above, the applicant respectfully submits that claims 1-30 of the subject application are in condition for allowance as they are not directed to non-statutory subject matter, and are novel and not obvious over the art cited by the Examiner. Accordingly, further examination and reconsideration of these claims is respectfully requested, and allowance of these claims at an early date is courteously solicited.

Respectfully submitted,



---

Richard T. Lyon  
Reg. No. 37,385  
Attorney for applicants

LYON & HARR, LLP  
300 Esplanade Drive, Suite 800  
Oxnard, CA 93036  
(805) 278-8855



## ANNOTATED SHEET

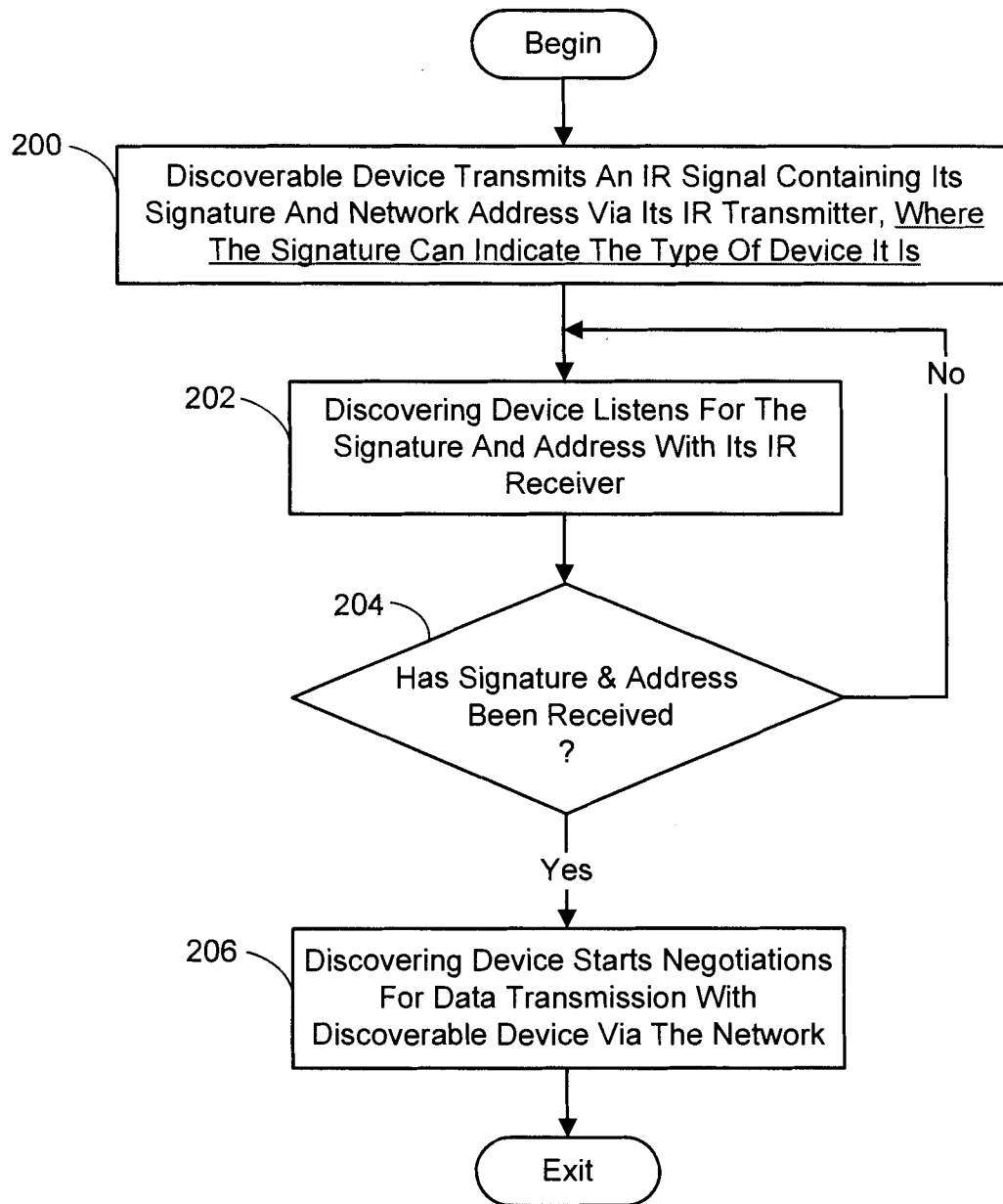


FIG. 2

## ANNOTATED SHEET

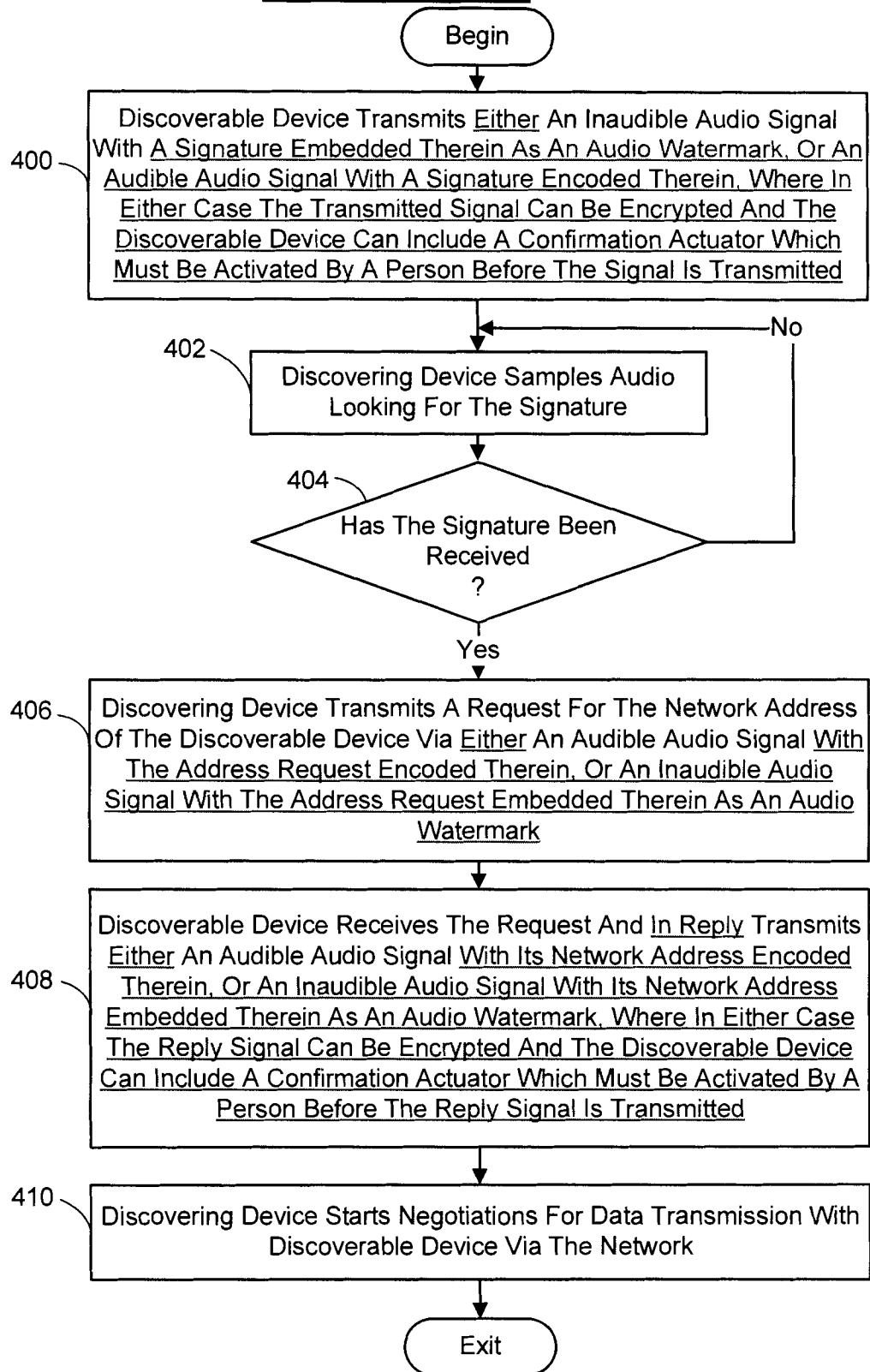
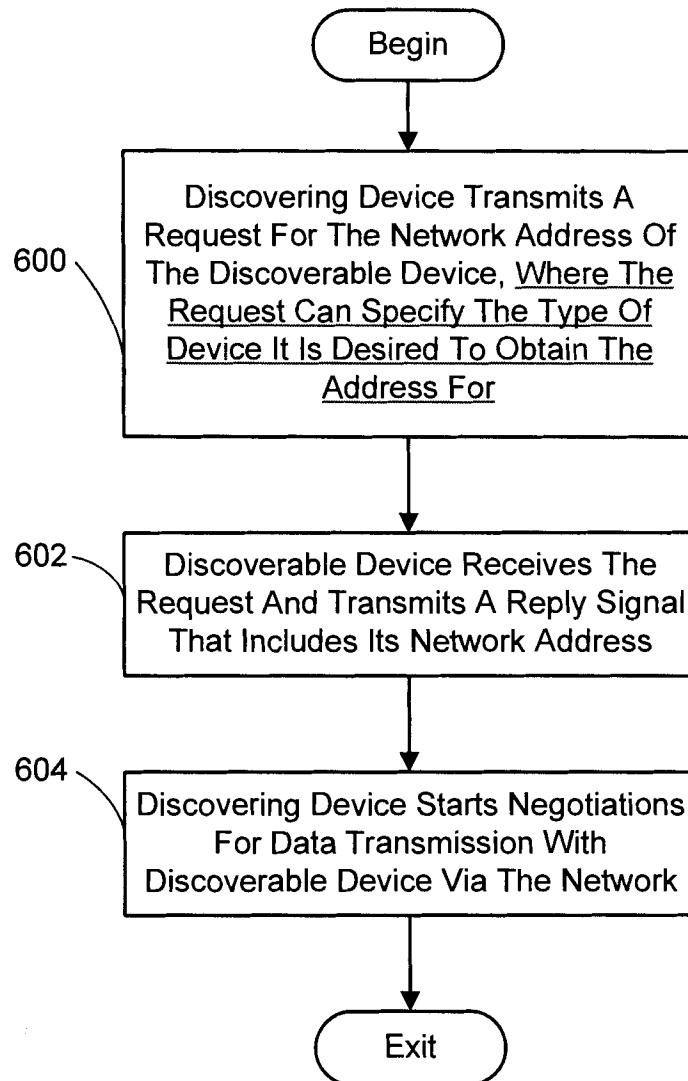


FIG. 4

**ANNOTATED SHEET**



**FIG. 6**